



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,375	08/15/2001	Indermohan S. Monga	120-178	9204
34845	7590	12/31/2007		
McGUINNESS & MANARAS LLP 125 NAGOG PARK ACTON, MA 01720			EXAMINER PATEL, ASHOKKUMAR B	
			ART UNIT 2154	PAPER NUMBER
			MAIL DATE 12/31/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/930,375

Applicant(s)

MONGA ET AL.

Examiner

Ashok B. Patel

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 8, 13, 20 and 32 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12, 14-19, 21-30, 33 and 34 is/are allowed.
- 6) ☒ Claim(s) 35-38 is/are rejected.
- 7) ☒ Claim(s) 1-7 and 9-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

Art Unit: 2154

DETAILED ACTION

1. Claims 1-38 are subject to examination. Claims 8, 13, 20 and 32 have been cancelled. Claim 31 is missing from the amendment.

Response to Arguments

2. Applicant's arguments filed , with respect to "wherein the optical service logic is operably coupled to interact with a service provider network to cause the service provider network to provide replacement services without manual intervention in response to a breach of the SLA "have been fully considered and are persuasive. The claims 1-7, 9-11 are objected to as below and the rejection of claims 12, 14-19, 21-30, 33 and 34 has been withdrawn.

Claim Objections

3. Claim 1 is objected to because of the following informalities: Claim recites, in line 12, "a plurality of incoming optical interface", which should be "interfaces". Appropriate correction is required.

4. Amendment is not addressing claim 31, which seems to be entirely missing from the claim list submitted along with the amendment dated 10/09/2007.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-7 and 9-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Referring to claim 1,

Art Unit: 2154

Claim 1 claims "an optical service agent" comprising optical service logic at a optical switched router is non-statutory, as the claim is clearly directed towards software, per se, and therefore not tangibly embodied in a manner so as to be executable.

Additionally, the specification at page 42-43 contains intrinsic evidence as this agent be implemented in a software executable object or as a set of instructions embedded in a "signal that is transmittable". " signals " are merely electro-magnetic signals and do not fall into any of the four statutory categories set forth in the above statute.

Referring to claims 2-7 and 9-11,

These claims are rejected for the same reasons set forth for claim 1.

Allowable Subject Matter

7. Claim 1-7 and 9-11 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action.
8. Claims 12, 14-19, 21-30, 33 and 34 are allowed.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless-

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2154

10. Claims 35-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Weldon et al. (hereinafter Weldon) (US 6, 366, 563 B1)

Referring to claim 35,

Weldon teaches a method for managing service level agreements in an optical communication system at an optical switched router, wherein the optical switched router includes a plurality of incoming optical interfaces, a plurality of outgoing optical interfaces and an optical switch coupling the plurality of incoming optical interfaces to the plurality of outgoing optical interfaces (col. 2, line 4-22, "VPNs, and in particular Internet VPNs, often choose to employ tunneling technology as a way to securely transfer data between two similar networks (e.g., private LANs) over an intermediate network such as UUNET net IP network. Tunneling (sometimes referred to as "encapsulation") encloses a first data packet in a new packet by appending a new header (transmitted in an unencrypted format) to the first data packet, so the network routes the new packet based on the information contained in the new header. The first data packet is usually encrypted when contained in the new data packet so no information can be gleaned from it, except by the intended recipient. The encapsulated packets travel through the network until they reach the destination identified in the new header. At the destination, the new header is stripped away and the first data packet is decrypted and processed. The tunneling and encryption may employ DES and 3DES standards-based technology for transferring data between network locations more securely via an OC-48 TCP/IP infrastructure, for example."

Art Unit: 2154

Thus, "tunneling technology "is used for LAN to securely transfer the data over an intermediate network such as UUNET net IP network which is "an OC-48 TCP/IP infrastructure." Also evidently, Weldon substantiates tunneling at col. 5, line 55-col. 6, line 11 and col. 6, line 54-67.

col. 6, line 29-53, col. 5, line 5-37, col. 9, line 21-26, "While encryption may be employed to improve information privacy, encryption need not be employed and thus is an optional feature, selected by a customer when subscribing to the VPN service. The source VPN probing router 207 may also employ multi-protocol label switching that prioritizes packets through the core communication network 217." Thus Weldon teaches "encryption for tunneling through OC-48 infrastructure" that is "optical" as stated in "a.", and an optical switched router including an optical switch coupling a plurality of incoming optical interface to a plurality of outgoing optical interfaces using optical switching logic controlled by the logic for managing connections." by employing "multi-protocol label switching that prioritizes packets through the core communication network 217.", as stated in "b.". Keep in mind that "prioritizing packets" is related to SLA.)

, the method comprising at least one of:

authenticating a request for communication services at a user-to-network interface (UNI) of the optical switched router. the request including a service level agreement (SLA);

monitoring and analyzing the connection in real-time for determining SLA compliance using a peer-to-peer interface of the optical-switched router; (col. 9, line 21-26)

Art Unit: 2154

gathering and maintaining statistical information relating to a connection;

analyzing statistical information off-line for determining SLA compliance, patterns, and trends (col. 11, line 34-42, "This may include dispatching a trouble-shooting technician to identify a source of the problem or adjusting the software settable parameters in the probing router, so as to be less stringent on the service level requirements imposed on the network. The corrective action may also include providing a refund to a client, if the service level agreement statistics were in fact below the required level. After step 523 the process then repeats so as to continue the SLA statistic collection and analysis operation."

Thus, Weldon teaches the SLA statistic collection and analysis operation.");

interacting with a service provider via the peer-to-peer interface to enforce penalty provisions in the SLA;

interacting with a service provider via the peer to peer interface to negotiate a credit for services not provided by the service provider in accordance with the SLA (col. 11, line 21-42);

interacting with a service provider via the peer-to-peer interface to negotiate "replacement" services for a breach of the SLA;

interacting with various network elements to rectify a breach of the SLA;

interacting with the service provider to dynamically modify the SLA based upon changing user requirements;

controlling the optical switch of the optical router in response to the SLA; and

interfacing with a billing/accounting system to provide SLA-related information.

Art Unit: 2154

Referring to claim 36,

Weldon teaches the method of claims 35. wherein monitoring and analyzing a connection in real-time for determining SLA compliance comprises at least one of:

monitoring the integrity of the connection to verify that the connection meets certain SLA criteria;

monitoring traffic on the connection to verify that the connection meets certain SLA criteria;

querying a core optical communication network in order to obtain information compiled by the core optical communication network for verifying that the connection meets certain SLA criteria; and

querying in order to obtain information compiled by the peer users for verifying that the connection meets certain SLA criteria. (col. 11, line 21-42)

Referring to claim 37,

Weldon teaches the method of claim 35, wherein interacting with various network elements to rectify a breach of the SLA comprises at least one of:

re-requesting the connection; and notifying a service provider of the SLA breach (col. 4, line 15-32, col. 8, line 62-col. 9, line 6); and orchestrating various network changes to resolve or work around the SIA breach.

Referring to claim 38,

Weldon teaches the method of claim 35, wherein interacting with the service provider to dynamically modify the SLA based upon changing user requirements comprises:

determining changing requirements of the user; and

dynamically re-negotiating the SLA to meet the changing requirements of the user. (col. 6, line 29-53)

Conclusion

Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 6:30 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan A. Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 2154

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Ashok Patel". The signature is fluid and cursive, with the first name "Ashok" being more prominent than the last name "Patel".

Ashok Patel

Examiner

AU2154